CALIFORNIA REGIONAL WATE SAN DIEGO REGION

UALITY CONTROL BOARD

9771 Clairemont Mesa Blvd., Suite B San Diego, California 92124-1331 Telephone: (619) 265-5114



CERTIFIED MAIL - RETURN RECEIPT REQUESTED

February 19, 1988

Ms. Lynn Manolopoulos Chevron USA, Incorporated P.O. Box 2833 La Habra, California 90632-2833

Dear Ms. Manolopoulos:

CLEANUP AND ABATEMENT ORDER NO. 88-22

Enclosed is Cleanup and Abatement Order No. 88-22. This Cleanup and Abatement Order is being issued to Chevron USA, Incorporated under the authority of California Water Code Section 13304 in response to the unauthorized fuel release from the underground storage tank system at Chevron service station No. 9-1408 located at 8888 Magnolia Avenue, Santee in San Diego County. The unauthorized fuel release has caused a "pollution" of the underlying ground water as defined in California Water Code Section 13050.

Basically, the Cleanup and Abatement Order directs Chevron USA, Incorporated to clean up the contamination resulting from the unauthorized petroleum hydrocarbon release. The Order requires Chevron USA, Incorporated to submit quarterly progress reports to this office until, in the opinion of the Executive Officer, the cleanup can be considered complete. The first quarterly progress report is due no later than July 31, 1988. A copy of these progress reports should also be sent to the County of San Diego Health Services.

The issuance of Cleanup and Abatement Order No. 88-22 will be discussed at the March 14, 1988, Regional Board meeting. This meeting is open to public participation and you are welcome to attend. It is scheduled for 9:00 a.m. at the State Office Building, Auditorium, Room B-109, 1350 Front Street, San Diego.

If you have any questions please call Mr. Scott Hugenberger at the above number.

Very truly yours,

LADIN H. DELANEY Executive Officer

LL

enc.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN DIEGO REGION

CLEANUP AND ABATEMENT ORDER NO. 88-22

CHEVRON USA, INCORPORATED SERVICE STATION NO. 9-1408 8888 MAGNOLIA AVENUE IN SANTEE SAN DIEGO COUNTY

The California Regional Water Quality Control Board, San Diego Region (hereinafter Regional Board) finds that:

- 1. Chevron USA, Incorporated owns and operates service station No. 9-1408 at 8888 Magnolia Avenue in San Diego County. The site lies in the Lower San Diego Hydrographic Subunit of the San Diego Hydrographic Unit.
- 2. On July 29, 1987, this office received written notification from Chevron USA, Incorporated of an unauthorized release of fuel from the underground storage tank system at the gasoline service station No. 9-1408 in Santee. Chevron USA, Incorporated reported that the leak was first discovered on July 12, 1983. The leak was located in the piping and was repaired on July 13, 1983.
- 3. On December 22, 1987, Chevron USA, Incorporated submitted a report to this office dated December 17, 1987. The report contains the following information:
 - a) More than four feet of fuel product has been observed floating on the ground water in the on-site monitoring wells.
 - b) An additional 300 gallons of super unleaded product was lost in July 1987.
 - c) The monitoring wells containing free product are currently being bailed by hand.
 - d) Chevron USA, Incorporated plans to do additional site assessment.
- 4. Data obtained from the County of San Diego Department of Health Services show that the ground water underlying the site contains petroleum hydrocarbon constituents in concentrations as high as the following:

Constituent	Concentration
Benzene	7302 μg/L
Toluene	9455 μg/L
Xylenes	$6231 \mu g/L$
Ethylbenzene	$722 \mu g/L$
Total volatile	
hydrocarbons	$33,498 \mu g/L$
Lead	60 μg/L

5. The Comprehensive Water Quality Control Plan Report, San Diego Basin (9) (Basin Plan) was adopted by this Regional Board on March 17, 1975; approved by the State Water Resources Control Board on March 20, 1975; and updated by the Regional Board on

February 27, 1978; March 23, 1981; January 24 and October 3, 1983; and August 27, 1984. The 1978, 1981, 1983 and 1984 updates were subsequently approved by the State Board.

- 6. The Basin Plan established the following uses as the potential and existing beneficial uses for the ground water in the Lower San Diego Hydrographic Subunit:
 - a. Municipal and domestic supply
 - b. Agricultural supply
 - c. Industrial service supply
 - d. Industrial process supply
 - e. Ground water recharge
- 7. The Basin Plan established the following uses as the potential and existing beneficial uses for the surface waters in the Lower San Diego Hydrographic Subunit:
 - a. Municipal and domestic supply
 - b. Industrial service supply
 - c. Ground water recharge
 - d. Water contact recreation
 - e. Non-contact water recreation
 - f. Warm fresh-water habitat
 - g. Cold fresh-water habitat
 - h. Wildlife habitat
 - i. Preservation of rare and endangered species
- 8. Section 13050 of the California Water Code defines "pollution" as follows:

"Pollution means an alteration of the quality of the waters of the State by waste to a degree which unreasonably affects (1) such waters for beneficial uses, or (2) facilities which serve such beneficial uses."

9. To protect the beneficial uses listed in Finding 6, it is necessary that the ground water aquifer underlying Chevron service station No. 9-1408 not contain constituents in concentrations exceeding the following State Department of Health Services (DOHS) Action levels and the United States Environmental Agency (U.S. EPA) recommended maximum contaminant level:

Constituent	Maximum Allowable Concentration
Benzene	$0.7 \mu \mathrm{g/L}$
Toluene	$\mu g/L$
Total xylenes	$620 \mu g/L$
Ethylbenzene	$680 \mu g/L$
Total lead	$50 \mu g/L$

10. The presence of petroleum hydrocarbons in the ground water underlying Chevron service station No. 9-1408 constitutes a "pollution" of the State's waters as defined in Finding 8 in accordance with the following rationale: The resulting concentrations of fuel constituents in the underlying ground water, listed in Finding 4, exceed the DOHS

drinking water action levels and U.S. EPA recommended maximum contaminant level listed in Finding 9 and therefore impair the ground water for any possible future municipal beneficial use.

- 11. The quality of the ground water underlying Chevron service station No. 9-1408 is subject to the provisions of the State Water Resources Control Board's Resolution No. 68-16, Statement of Policy With Respect to Maintaining High Quality Waters in California. Under the terms and conditions of Resolution No. 68-16, the existing (pre-discharge) ground water quality of the Lower San Diego Hydrographic Subunit must be maintained unless it is demonstrated that a decrease in water quality
 - (a) will be consistent with maximum benefit to the people of the state,
 - (b) will not unreasonably affect beneficial uses, and
 - (c) will not result in water quality less than prescribed in the Basin Plan or other adopted policies.
- 12. This enforcement action is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000 et seq.) in accordance with Section 15321, Chapter 3, Title 14, California Administrative Code.

IT IS HEREBY ORDERED, That pursuant to Section 13304 of the California Water Code, Chevron USA, Incorporated (hereinafter the discharger) shall comply with the following directives:

- 1. The discharger shall take effective remedial action to:
 - a. Immobilize the free product plume and the dissolved product plume of petroleum hydrocarbon contaminated ground water.
 - b. Protect the beneficial uses of the ground water of the Lower San Diego Hydrographic Subunit.
 - c. Clean up the petroleum hydrocarbon contaminated ground water and soil to the satisfaction of the Regional Board Executive Officer.
- 2. The discharger shall submit a report to this office no later than April 1, 1988, describing the remediation actions taken to comply with this Directive 1.
- 3. The discharger shall submit a report to this office no later than May 19, 1988, characterizing the vertical and horizontal extent of the petroleum hydrocarbon contamination resulting from the unauthorized release from the underground storage tank systems at Chevron service station No. 9-1408. The report shall contain the following information:

- a. A site map showing the location of all borings and monitoring wells, the locations of the excavated tanks, and any underground utilities that might act as conduits along which the petroleum hydrocarbons could migrate.
- b. The water levels and product thicknesses, if any, in all of the wells.
- c. A site map showing the hydrologic contours and the boundary of the free product and dissolved product plumes.
- d. The laboratory results of the chemical analysis on the soil and ground water samples collected during the site investigation. Samples should be analyzed for:
 - (1) Benzene
 - (2) Toluene
 - (3) Total xylenes
 - (4) Ethylbenzene
 - (5) Total petroleum hydrocarbons
 - (6) Organic lead
- e. A remedial action strategy to clean up the effects of the unauthorized release from the excavated underground storage tank system at Chevron service station No. 9-1408. The strategy should address the removal and/or treatment of the free product plume (if any), the dissolved product ground water plume, and the soil contamination zone.
- 4. The discharger shall submit monitoring reports to this office on a quarterly basis until, in the opinion of the Regional Board Executive Officer, the site has been cleaned up. The monitoring reports shall describe the progress made in the cleanup operations and shall demonstrate that the petroleum hydrocarbon waste released from the underground tank system has been and remains immobilized. The quarterly monitoring reports shall include, but not be limited to, the following information:
 - a. Quantity of petroleum hydrocarbon product recovered for the quarter and the total to date.
 - b. Quantity of ground water extracted for the quarter, the total to date, and its ultimate disposal point.
 - c. The ground water elevations and product thicknesses in all of the wells.
 - d. Any information necessary to demonstrate that the petroleum hydrocarbon contamination resulting from the unauthorized release from the underground tank system at the site is fully contained and immobilized or shrinking.
 - e. A map of the site with hydrologic contours showing the ground water flow pattern and the locations of all of the wells.
 - f. A map of the site showing the boundary of the free petroleum hydrocarbon product plume and also of the dissolved product ground water plume.

- g. All ground water samples should be analyzed for:
 - (1) Benzene
 - (2) Toluene
 - (3) Total xylenes
 - (4) Ethylbenzene
 - (5) Total petroleum hydrocarbons
 - (6) Chlorinated hydrocarbons, if these constituents were contained in the discharge
 - (7) Organic lead, if this constituent was contained in the discharge.
- h. A description of the remedial actions employed by the discharger.

The quarterly monitoring reports shall be submitted to this Office in accordance with following schedule:

Reporting Period	Date Due
January, February, March	April 30
April, May, June	July 31
July, August, September	October 31
October, November, December	January 31

- 5. The discharger shall submit a report to this office by February 28, 1990, identifying and developing a range of remedial action alternatives for the final phase of the cleanup program. The report shall examine and determine the cost of a cleanup strategy capable of achieving each of the following potential final cleanup levels in the affected ground water zone:
 - a. Treatment and/or removal of the polluted ground water to attain the naturally occurring background concentrations for the following constituents in the underlying ground water aquifer:
 - (1) Benzene
 - (2) Toluene
 - (3) Total xylenes
 - (4) Ethylbenzene
 - (5) Total lead

This cleanup alternative represents basically complete cleanup of pollution resulting from the petroleum hydrocarbon discharge. If the discharger wishes to implement this cleanup alternative, the discharger will not be required to develop cleanup strategies corresponding to alternatives 5(b) and 5(c).

b. A remedial action alternative proposing the attainment of petroleum hydrocarbon concentrations less stringent than those specified in (a). It will be necessary to establish, that the petroleum hydrocarbon concentrations being proposed by the

discharger under this alternative would comply with the following criteria in accordance with Resolution No. 68-16:

- (1) The proposed petroleum hydrocarbon concentrations to be attained in the affected ground water pollution zone would not unreasonably affect the beneficial uses of the ground water listed in Finding 5 or of any hydraulically connected surface waters.
- (2) The proposed petroleum hydrocarbon concentrations to be attained in the affected ground water pollution zone will be consistent with the maximum benefit to the people of the State.
- (3) The proposed petroleum hydrocarbon concentrations to be attained in the affected ground water pollution zone will not result in water quality less than prescribed in the Basin Plan or other adopted policies.
- c. Treatment and/or removal of the polluted ground water to attain the following DOHS Action Levels and the U.S. EPA recommended maximum contaminant level in the underlying ground water aquifer:

Constituent	Maximum Concentration
Benzene	0.7 μg/L
Toluene	$\mu g/L$
Total xylenes	$620 \mu g/L$
Ethylbenzene	$680 \mu g/L$
Lead	$\mu g/L$

All free petroleum hydrocarbon product must be removed under all three alternatives. The report should include a table summarizing the cleanup level versus cost information.

- 6. The cleanup alternatives required under Directive 5 of this Order will be evaluated in detail by Regional Board staff. This evaluation will include technical considerations, estimated costs, and anticipated water quality impacts associated with each alternative. Based on this evaluation a specific set of final cleanup levels will be selected by the Regional Board. Upon notification by the Executive Officer, the discharger shall implement a cleanup strategy capable of achieving the final cleanup levels selected by the Regional Board.
- 7. The discharger shall remove and/or treat all soil containing total extractable petroleum hydrocarbons in concentrations exceeding 100 mg/kg, unless the discharger can demonstrate to the satisfaction of:
 - (a) the Regional Board staff that higher soil concentrations will not result, under ambient environmental conditions at the site, in waste constituents being released at concentrations which could degrade the quality of the underlying ground water; and

- (b) the County of San Diego Department of Health Services that higher soil concentrations will not present a threat to the public health.
- 8. The discharger shall dispose of all ground water and/or soil polluted with petroleum hydrocarbons in accordance with all applicable local, state and federal regulations.
- 9. No later than February 1, 1991, the discharger must demonstrate to the Regional Board Executive Officer's satisfaction that the final cleanup levels, as determined by the Regional Board under Directives 5, 6 and 7, have been achieved throughout the soil and ground water contamination zones. The discharger shall continue to monitor the ground water and submit quarterly monitoring reports in accordance with Directive 3 of this Order for a period of one year. If at any time during this post-cleanup monitoring the data indicate that the final cleanup levels have not been maintained, the discharger shall immediately resume appropriate remedial cleanup actions. If the data indicate that the soil is not contributing petroleum hydrocarbon constituents to the ground water and the final cleanup levels have not been exceeded for the year of monitoring, then no further monitoring shall be required.

Ordered by

Ladin H. Delaney Executive Officer

Dated: February 19, 1988

LL

postmaster for fees and check box(es) for additional si 1. Show to whom delivered, date, and addressee's 1/Extra charge)1	
3. Article Addressed to:	4. Article Number
Ms. Lynn Manolopoulos Chevron USA, Incorporated P.O. Box 2833 La Habra, Ca 90632	P 787 009 199 Type of Service: Registered Insured CY Certified COD Express Mail
	Always obtain signature of addressee or agent and <u>DATE DELIVERED</u> .
5. Signature Addressee X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature Agent Winden	
7. Date of Delivery 2-22-88	

Y 1 X . C. C.	NO INSURANCE NOT FOR IN	Coverage 29 Ternational I Severae)		
Sent to	f:se.p	7 76: 9157 (1157		
•	nn Man	olopoul	los/Che	vron
P.O. B	ox 283	3	nanco ananco e nanco e cara	C&A
PO SQ La Hab	e and ZEP C ra, CA	⁵ 90632-	-2833	1
Postage	a and a second and a		\$	88-
Certified F		rayan sahat at atau sahatat ahan ahat a saharata		22
	···	*******		oo
Special D	civery y ec			8888
Restricted	Delatory Fe	3e		1
	eceipt show- and Date Or			Magnolia
Beturn Bi Date, and	eceipt show LAddress of	ng to whom Delivery		lia
TOTAL F	ostage and	Fees	š	Ave
Postmark	or Date		***************************************	•
	01	21988		Santee
	of the l	elurn addre	SS	
	CEF	TIFI	ED	
	787	009	3, 9 9	. A.

DOMESTIC RETURN RECEIPT	PS Form 3811, Mar. 1987 + U.S.G.P.O. 1987-178-268
	7. Date of Delivery
	X
	6. Signature - Agent
	X
8. Addressee's Address (CNL 11) requested and fee paid)	5. Signature Addressee
or agent and DATE DELIVERED.	
Express Mail	La Habra, Ca 90632
Certified LI COD	P.O. Box 2833
	Chevron USA, Incorporated
Type of Service:	Ms. Lynn Manolopoulos
P 787 009 199	3. Article Addressed to:
4. Article Number	A Jahrana + Prince Prince
7 (Extra charge)	Destinates for fees and check box(es) for additional servicests postmaster for fees and check box(es), and addresses's address. 1. □ Show to whom delivered, data, and addresses's address.
e side. Failure to do this will prevent time the parties of the pa	Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will previde you the name of the parson card from being returned to you. The return receipt fee will provide you the name of the parson card from being returned to you. The return receipt fees the following services are available. Consult
vices are desired, and complete items	SENDER: Complete items 1 and 2 when additional services are desired, and complete items

State of California Regional Water Quality Control Board San Diego Region

EXECUTIVE OFFICER SUMMARY REPORT March 14, 1988

Item:

20(c)

Subject:

ENFORCEMENT

CLEANUP AND ABATEMENT ORDER NO. 88-22

CHEVRON USA, INCORPORATED, STATION NO. 9-1408

8888 MAGNOLIA AVENUE, SANTEE

SAN DIEGO COUNTY

Discussion:

Chevron U.S.A., Incorporated owns and operates service station

No. 9-1408 at 8888 Magnolia Avenue, Santee in San Diego County. A leak

in the underground storage tank system at station No. 9-1408 has

resulted in the pollution of the underlying ground water.

On February 19, 1988, the Executive Officer issued Cleanup and Abatement Order No. 88-22 to Chevron U.S.A., Incorporated in response to the soil and ground water contamination at service station No. 9-1408. The Cleanup and Abatement Order contained in today's agenda directs Chevron

U.S.A., Incorporated to clean up the petroleum hydrocarbon

contamination resulting from the underground fuel tank leak and to submit quarterly progress reports to this office for the remainder of

the cleanup program.

Issue:

Does Chevron U.S.A., Incorporated have any objections to the issuance

of Cleanup and Abatement Order No. 88-22?

Recommendation:

Staff will make a brief presentation on this item if necessary.